





Accessible Hands-on Science for Children: A Partnership in Informal Education Outreach

A Presentation to the
NOAA Education Council

Informational Brief

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- To request the NOAA Education Council to:
 1. Support a partnership between Mad Science and NOAA Education to collaborate in the development of after school and summer camp programs on NOAA-related oceanic and atmospheric sciences.
 2. Collaborate with Mad Science in the education of children and their families about the technology employed by NOAA in oceanic and atmospheric sciences.



Mad Science®

History

Founded in 1985, brothers Ariel and Ron Shlien transformed their love for having fun and performing engaging science experiences, into a powerful distribution channel that contributes to the lives of millions of children worldwide.

Mission

Mad Science is on a mission to spark the imagination and curiosity of children by providing them with fun, interactive and educational programs that instill a clear understanding of what science is, and how it affects their world.



Mad Science – Our Reach

- The world's leading brand of hands-on, educational, and entertaining science activities for kids and families.
- Provide outreach programming through formal and informal channels of science education
- Over 200 hours of interactive content in 6 areas of business: in-school workshops, after school programs, summer camps, birthday parties, special events and preschool programs.

Distribution

- Over 150 locations worldwide
- 250,000 live presentations annually
- 3,500 Mad Science instructors

Market Reach to:

- 25,000 schools (accessing 20 million children)
- 350,000 teachers
- 5 million customer kids



Mad Science in the United States





Mad Science Around the Globe



Albany
Anaheim
Arlington
Atlanta
Austin
Baltimore
Birmingham
Boston
Brooklyn
Charlotte
Chicago
Cincinnati
Cleveland
Colorado Springs
Columbus
Dallas
Denver
Detroit
El Paso
Fort Lauderdale

Fort Wayne
Fort Worth
Fresno
Gainesville
Greensboro
Hartford
Hershey
Houston
Indianapolis
Las Vegas
Lexington
Long Island
Los Angeles
Louisville
Madison
Manhattan
Milwaukee
Minneapolis
Oakland
Orlando
Palm Beach
Peoria
Philadelphia
Phoenix
Pittsburgh

Portland, OR
Portland, ME
Raleigh
Reno
Richmond
Sacramento
Salt Lake City
San Antonio
San Diego
San Francisco
Seattle
Scottsdale
St. Louis
St Petersburg
Springfield, MA
Tampa
Tucson
Ventura
Washington
Wilmington
Winston Salem



Calgary
Halifax
Hamilton
Kitchener
London
Moncton
Montreal
Niagara
Ottawa
Quebec City
Toronto
Vancouver
Victoria
Windsor
Winnipeg



Bahrain
Brazil
Dubai
Ireland
Kuwait
Morocco
Netherlands
Nigeria
Oman
Peru
Philippines
Saudi Arabia
Singapore
Spain
Thailand
Turkey
United Kingdom
United Arab Emirates



Mad Science - Education

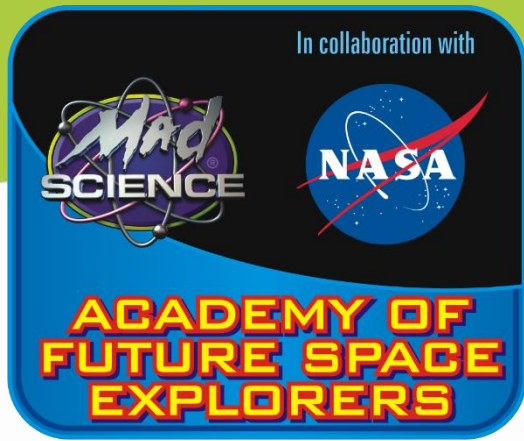
- Elementary school level science - grades K-6
- Focus on STEM via hands-on experimentation
- Programs correlated to NGSS, Canadian and international science standards by region
- Recently introduced engineering program – based on LEGO® bricks to meet NGSS engineering standards





Mad Science – Communities Served

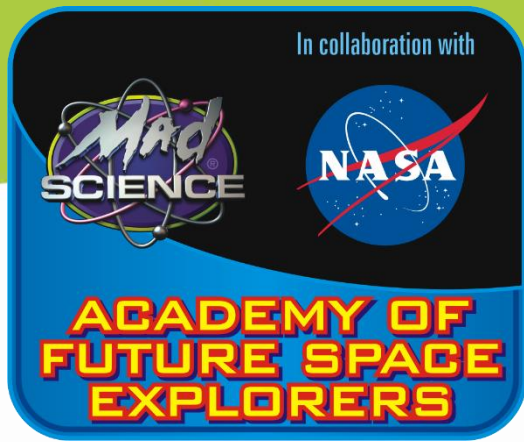
- U.S. Locations participate in 21st CCLC program
- Title I schools, Boys & Girls Clubs, non-profit partners in community
- Grant programs throughout US and Canada including mini grant program with National Girls Collaborative Project (NGCP)
- NSF AISL grant project– underserved communities in Saturday STEM learning for families



NASA Partnership

- International Space Act Agreement since 2006
- Collaborated on an 8-week after school program for children ages 5-12 = **Academy for Future Space Explorers**
- Designed as a “primer” for children to understand the basics of space exploration - the solar system, space phenomena, rocketry, technology, life in space and understanding atmosphere.
- Adapted to include one-week, half day summer camp programming





NASA Partnership

- Partnership initiated by NASA to complement their existing outreach activities at the elementary level in informal education
- Goal is to continue to educate children about NASA's mission to explore space and to support their Science Mission Directorate (SMD)
- Provides NASA with a global, compliant distribution network for content and awareness





Academy for Future Space Explorers - Evaluation

- Annual Report sent to NASA each December

Program Stat Summary NASA AFSE 2014-2015

- Total locations offering NASA AFSE = 113
 - Total U.S. locations offering NASA AFSE = 71
 - Total International locations offering NASA AFSE = 42
 - Estimated reach = 315,000 children
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- **Program evaluated each year:**
 - 1) Ongoing Customer surveys via network
 - 2) NASA franchisee committee for program/product feedback
 - 3) Kids' Advisory Board to evaluate any new or updated content



Aligns to NOAA Education Strategic Plan

Goal 1: Science-Informed Society

- ✓ Targets youth, informal education; targets K-6 and incorporates engineering & technology

Goal 2: Conservation and Stewardship

- ✓ Modules include conservation/stewardship practices

Goal 3: Safety and Preparedness

- ✓ Modules include safety/preparedness awareness

Goal 4: Future Workforce

- ✓ Title 1 schools, underserved communities

Goal 5: Organizational Excellence

- ✓ Partnership, coordinated educational approach, and robust evaluation practices